

Amendments to the claims

1 (Original): A system for data base management, comprising:

at least one memory device suitable to hold a database having a plurality of tables of data,
wherein each table can occupy at least one extent;
a buffer cache suitable to store a plurality of said extents;
a database engine suitable to process a plurality of queries with respect to particular said data by:
reviewing each said query to determine a respective extents list of said extents
containing said particular said data needed by that said query;
retrieving said extents from said memory devices as ordered in said extents lists;
storing said extents that are retrieved in said buffer cache; and
executing said queries on said particular said data in respective said extents stored
in said buffer cache to determine respective results; and
a query monitor suitable to re-order said extents lists so that said extents that are
retrieved and stored in said buffer cache are used more efficiently by said
queries.

2 (Original): The system of claim 1, wherein:

said query monitor is suitable to monitor which said extents are presently in said buffer
cache and to re-order said extents lists so that said extents already stored in said
buffer cache are used more efficiently by said plurality of queries.

3 (Original): The system of claim 1, wherein:

said query monitor is suitable to monitor which said extents in said buffer cache said
database engine is currently executing some said queries against; and
said query monitor is suitable to re-order said extents lists so that said extents already
stored in said buffer cache are used more efficiently by other said queries.

Amendments to the claims

4 (Original): The system of claim 1, wherein:

said query monitor is suitable to re-order said extents lists so that some said queries are executed at least partially concurrently using at least one same said extent stored in said buffer cache.

5 (Original): The system of claim 1, wherein:

said query monitor is suitable to re-order said extents lists so that some said queries are executed contiguously using at least one same said extent stored in said buffer cache.

6 (Original): The system of claim 1, wherein:

said database engine is suitable queue said plurality of queries into a query list; and said query monitor is suitable to re-order said query list so that said extents that are retrieved and stored in said buffer cache are used more efficiently by said queries.

7 (Original): A method for data base management, comprising the steps of:

- (a) receiving a plurality of queries with respect to data in at least one of a plurality of tables in a database, wherein each table occupies at least one extent;
- (b) reviewing each said query and determining a respective extents list of said extents containing said data needed by that said query; and
- (c) re-ordering said extents lists based on an order calculated to be more efficient for execution of said plurality of queries.

8 (Original): A method for data base management, comprising the steps of:

- (a) receiving a plurality of queries with respect to data in at least one of a plurality of tables in a database, wherein each table occupies at least one extent;
- (b) reviewing each said query and determining a respective extents list of said extents containing said data needed by that said query;
- (c) re-ordering said extents lists based on an order calculated to be more efficient for execution of said queries;

Amendments to the claims

- (d) loading said extents from said database as ordered in said extents lists into a buffer cache; and
- (e) executing said queries on said data in respective said extents in said buffer cache to determine respective results.

9 (Original): The method of claim 8, wherein:

said step (c) includes monitoring which said extents are presently in said buffer cache and re-ordering said extents lists so that at least some said extents already in said buffer cache are used more efficiently by said plurality of queries.

10 (Original): The method of claim 9, wherein:

said step (c) includes monitoring which said extents in said buffer cache some said queries are currently being executed against and re-ordering said extents lists so that at least some said extents already in said buffer cache are used more efficiently by other said queries.

11 (Original): The method of claim 8, wherein:

said step (c) includes re-ordering said extents lists so that some said queries are executed at least partially concurrently in said step (e) using at least one same said extent in said buffer cache.

12 (Original): The method of claim 8, wherein:

said step (c) includes re-ordering said extents lists so that some said queries are executed contiguously in said step (e) using at least one same said extent in said buffer cache.

13 (Original): The method of claim 8, wherein:

said step (a) includes queuing said plurality of queries into a query list; and
said step (c) includes re-ordering said query list so that at least some said extents in said buffer cache are used more efficiently by said queries.

Amendments to the claims

14 (Original): A system for data base management, comprising:

- means for receiving a plurality of queries with respect to data in at least one of a plurality of tables in a database, wherein each table occupies at least one extent;
- means for reviewing each said query and determining a respective extents list of said extents containing said data needed by that said query;
- means for re-ordering said extents lists based on an order calculated to be more efficient for execution of said queries;
- means for loading said extents from said database as ordered in said extents lists into a buffer cache; and
- means for executing said queries on said data in respective said extents in said buffer cache to determine respective results.

15 (Original): The system of claim 14, wherein:

- said means for re-ordering includes means for monitoring which said extents are presently in said buffer cache and said means for re-ordering re-orders said extents lists so that at least some said extents already in said buffer cache are used more efficiently by said plurality of queries.

16. The system of claim 14, wherein:

- said means for re-ordering includes means for monitoring which said extents in said buffer cache some said queries are currently being executed against and said means for re-ordering re-orders said extents lists so that at least some said extents already in said buffer cache are used more efficiently by other said queries.

17 (Original): The system of claim 14, wherein:

- said means for re-ordering re-orders said extents lists so that some said queries are executed at least partially concurrently by said means for executing using at least one same said extent in said buffer cache.

Amendments to the claims

18 (Original): The system of claim 14, wherein:

said means for re-ordering re-orders said extents lists so that some said queries are executed contiguously by said means for executing using at least one same said extent stored in said buffer cache.

19 (Original): The system of claim 14, wherein:

said means for receiving queues said plurality of queries into a query list; and
said means for re-ordering re-orders said query list so that at least some said extents that are retrieved and stored in said buffer cache are used more efficiently by said queries.

20 (Currently amended): A computer program, embodied on a computer readable storage medium÷, the computer program comprising:

a code segment that receives a plurality of queries with respect to data in at least one of a plurality of tables in a database, wherein each table occupies at least one extent;
a code segment that ~~reviews~~ reviews each said query and determines a respective extents list of said extents containing said data needed by that said query;
a code segment that re-orders said extents lists based on an order calculated to be more efficient for execution of said queries;
a code segment that loads said extents from said database as ordered in said extents lists into a buffer cache; and
a code segment that ~~executs~~ executes said queries on said data in respective said extents in said buffer cache to determine respective results.